

What is claimed is:

1. A color CRT comprising:

a panel having a substantially flat outer surface and an inner surface  
5 having a predetermined curvature;

a funnel coupled to a rear surface of the panel; and

a reinforcing band coupled to a skirt portion of the panel in order to  
prevent an explosion of the panel and the funnel;

wherein an aspect ratio of an effective surface of the panel is 4:3 and a  
10 following condition  $0.0426*U^2-46.848*U+14095 \leq T*W*Y_p \leq 0.0381*U^2-$   
 $35.517*U+9994.1$  is satisfied;

wherein U denotes a diagonal size of the effective surface of the panel, T  
denotes a thickness of the reinforcing band, W denotes a width of the reinforcing  
band, Y<sub>p</sub> denotes a yield strength of the reinforcing band, and T\*W\*Y<sub>p</sub> denotes  
15 a band force F of the reinforcing band.

2. A color CRT comprising:

a panel having a substantially flat outer surface and an inner surface  
having a predetermined curvature;

20 a funnel coupled to a rear surface of the panel; and

a reinforcing band coupled to a skirt portion of the panel in order to  
prevent an explosion of the panel and the funnel;

wherein an aspect ratio of an effective surface of the panel is 16:9 and a  
following condition  $2.3333*U+252 \leq T*W*Y_p \leq 7*U-2268$  is satisfied,

25 wherein U denotes a diagonal size of the effective surface of the panel, T

denotes a thickness of the reinforcing band, W denotes a width of the reinforcing band, Yp denotes a yield strength of the reinforcing band, and  $T \cdot W \cdot T \cdot Y_p$  denotes a band force F of the reinforcing band.

5           3.       The color CRT of claim 1, wherein a following condition  $0.03 \leq (R_h \cdot R_v \cdot R_o) / U \leq 0.12$  is satisfied,

              wherein the  $R_h$  is a value obtained by dividing an inner curvature radius  $R_x$  of the effective surface of the panel along the long axis X by  $1.767 \cdot a$  size  $L_x$  of the effective surface along the long axis, the  $R_v$  is supposed to be a value  
10       obtained by dividing an inner curvature radius  $R_y$  of the effective surface of the panel along the short axis Y by  $1.767 \cdot a$  size  $L_y$  of the effective surface along the short axis, and the  $R_o$  is supposed to be a value obtained by dividing an inner curvature radius  $R_d$  of the effective surface of the panel along the diagonal axis D by  $1.767 \cdot a$  size  $L_d$  of the effective surface along the diagonal axis.

15           4.       The color CRT of claim 1, wherein a following condition  $1.0 \leq T \leq 1.8$  is satisfied.

              5.       The color CRT of claim 2, wherein an embossment is formed at  
20       one side of the reinforcing band corresponding to a mold match line of the panel.

              6.       The color CRT of claim 2, wherein a following condition  $0.03 \leq (R_h \cdot R_v \cdot R_o) / U \leq 0.12$  is satisfied.

25           7.       The color CRT of claim 2, wherein a following condition  $1.0 \leq T \leq$

1.5 is satisfied.

8. The color CRT of claim 1, wherein an embossment is formed at one side of the reinforcing band corresponding to a mold match line of the panel.

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